

Wounds digest

In this section, we present brief synopses of a range of recently published articles that may be of interest to healthcare professionals working in the wound care setting. The aim of this round-up is to provide an overview, rather than a detailed summary and critique, of the research papers selected. Full references are provided should you wish to look at any of the papers in more detail.

1 Prevalence of chronic wounds in hospitalised patients in Catalonia, Spain: a multicentre cross-sectional descriptive observational study

Readability	✓	✓	✓		
Relevance to daily practice	✓	✓	✓	✓	
Novelty factor	✓	✓			

- The authors of this study examined the clinical characteristics of adult inpatients with chronic wounds admitted to eight hospitals in Spain over a 5-year period between 2016 and 2020.
- This was a descriptive, observational, cross-sectional and retrospective multicentre study that used routinely collected clinical data. The study encompassed hospital wards, step-down units and home hospitalisation services and included all patients aged 18 years or older who were hospitalised with chronic wounds during the study period.
- The most common types of chronic wounds were pressure injuries and arterial ulcers, with cardiovascular and respiratory conditions the main causes of admission for these patients. Arterial and diabetic foot ulcers were more prevalent in men and venous ulcers were more common in women. Patients with pressure injuries had longer hospital stays, higher rates of intensive care admissions and increased in-hospital mortality.
- The authors stated that their results highlight the fact that chronic wounds remain an important problem.

López-Jiménez MM, Romero-García M, Adamuz J et al (2025) Prevalence of chronic wounds in hospitalised patients in Catalonia, Spain: a multicentre cross-sectional descriptive observational study. *BMJ Open* 15(5): e095542

2 Chronic wound management in Romania: a survey on practices, protocols, and PRP efficacy

Readability	✓	✓	✓		
Relevance to daily practice	✓	✓	✓	✓	
Novelty factor	✓	✓	✓		

- In Romania, the absence of a standardised national therapeutic protocol for chronic wounds has resulted in inconsistent clinical practice.
- The authors carried out a survey to assess management strategies among physicians treating chronic wounds. A 37-question questionnaire was sent to plastic surgeons, general surgeons, vascular surgeons and dermatologists in Bucharest, Romania.
- Of the 240 respondents, many treated several cases per week (40.8%) of delayed healing wounds, with the most frequent types being bedsores (57.5%) and diabetic (58.3%) or venous ulcers (55%). Most physicians used an

initial conservative approach in wound care (52.5%) or did not have a standard approach (44.2%).

- Around a quarter of respondents (25.8%) used platelet-rich plasma (PRP). Physicians were highly interested in the use of a standardised treatment protocol (40%). Also, 41.7% of respondents expressed a very high interest in having a standardised diagnostic system for chronic wounds.
- This study highlights that wound care practices in the country remain variable and that the decision-making process is often challenging. Therapeutic protocols were seen as key to improving care efficacy and consistency, therefore there is a strong case for national strategies to support this.

Riza SM, Porosnicu AL, Hariga CS, Sinescu RD (2025) Chronic wound management in Romania: a survey on practices, protocols, and PRP efficacy. *Medicina (Kaunas)* 61(6): 1085

3 Immunomarker profiling in human chronic wound swabs reveals IL-1 beta/IL-1RA and CXCL8/CXCL10 ratios as potential biomarkers for wound healing, infection status and regenerative stage

Readability	✓	✓	✓	✓	
Relevance to daily practice	✓	✓			
Novelty factor	✓	✓	✓	✓	✓

- Immunomarker profiling could provide a deeper understanding of the molecular mechanisms of wound healing. This observational, multi-centre cohort study is part of the Wound-BIOME project.
- The researchers analysed 110 swab samples from patients with acute and chronic wounds using multiplex immunoassays. They assessed total protein concentration and quantified 35 key immunomarkers, including cytokines, chemokines, growth factors and matrix metalloproteinases. Statistical analyses correlated immunomarker levels with clinical outcomes.
- Pro-inflammatory markers, such as IL-1-beta, IL-18 and chemokines CCL2 and CXCL8, were significantly elevated in non-healing and infected wounds compared to healing wounds. The study identified two new immunomarker ratios (IL-1-beta:IL-1RA and CXCL8:CXCL10) as potential predictors of wound healing status. The former ratio showed the highest accuracy for distinguishing healing from non-healing wounds, while the latter was most effective in identifying infection.
- The authors concluded that immunomarker profiling via swabbing offers valuable insights into the wound healing process. Elevated levels of pro-inflammatory cytokines and MMPs are associated with chronic inflammation

and impaired healing. The two newly identified ratios are promising biomarkers to distinguish between infection and inflammation, with potential to improve targeted wound care.

Rembe JD, Garabet W, Augustin M et al (2025) Immunomarker profiling in human chronic wound swabs reveals IL-1 beta/IL-1RA and CXCL8/CXCL10 ratios as potential biomarkers for wound healing, infection status and regenerative stage. *J Transl Med* 23(1): 407

4 Selective nonoperative management of abdominal stab wounds in low- and middle-income countries

Readability	✓	✓	✓		
Relevance to daily practice	✓	✓	✓		
Novelty factor	✓	✓	✓	✓	✓

- Selective nonoperative management (SNOM) of abdominal stab wounds is a well-established approach. The authors performed a systematic review and meta-analysis to examine the safety and feasibility of this strategy in upper-middle-income, lower-middle-income, low-income, and least developed countries.
- They performed a literature search and extracted study characteristics and method of SNOM (use of computed tomography scanning versus serial examination only). Pooled results for failure of SNOM, mortality, complications, and length of stay were analysed.
- Twenty studies were selected, giving 1,505 patients initially managed nonoperatively, with 245 ultimately requiring surgical intervention. There was no reported mortality in patients selected for SNOM. Length of stay was generally higher in patients undergoing primary operative management and complications were more frequent in these patients.
- The authors concluded that SNOM of abdominal stab wounds is a safe method of managing these injuries. CT is now commonly used to aid in decision-making about suitability for attempted SNOM in lower-resource settings.

Moffatt S, Biggs D, Kong V, Clarke D (2025) Selective nonoperative management of abdominal stab wounds in low- and middle-income countries: a systematic review and meta-analysis. *World J Surg* 49(4): 1115–27

5 Discriminatory ability of the current pressure ulcer risk assessment scale in critically ill patients in Quito, Ecuador

Readability	✓	✓	✓		
Relevance to daily practice	✓	✓	✓		
Novelty factor	✓	✓			

- The authors aimed to evaluate the discriminative ability of the current pressure ulcer risk assessment scale in critically ill patients in Quito, Ecuador.
- This was an observational, longitudinal, prospective study, recruiting patients hospitalised for more than 48 hours without evidence of ulcers on admission. Demographic and clinical variables were recorded, along with the current risk assessment scales, Norton scale and the development of ulcers.

- Five out of 306 enrolled patients developed ulcers (1.63%). Grade 2 ulcers and sites on the face and head were most common. For the current risk assessment scale, the ROC curve defined the best cut-off point of 13, at 48 hours. For Norton, the ROC curve defined the best cut-off point as 9, at 48 hours.
- The authors determined that the current risk assessment scale, similar to the Norton scale, can be used to discriminate the occurrence of pressure ulcers in critically ill patients. The best assessment may be at 48 hours after admission.

Guerrero-Toapanta FM, Sandoval-Cóndor MJ, Usuay-Usuay MT et al (2025) Discriminatory ability of the current pressure ulcer risk assessment scale in critically ill patients in Quito, Ecuador. *Enferm Intensiva (Engl Ed)* 36(2): 100505

6 Relationships between anxiety, depression and wound healing outcomes in adults: A systematic review and meta-analysis

Readability	✓	✓	✓	✓	
Relevance to daily practice	✓	✓	✓	✓	✓
Novelty factor	✓	✓	✓		

- The authors of this study performed a systematic review and meta-analysis to examine whether there is a relationship between anxiety and/or depression and wound healing.
- They included studies that explored the effects of anxiety and/or depression on wound healing in adults. Healing outcomes included time to heal and complication rates. Anxiety and depression outcomes were considered separately. They included 55 studies in the narrative synthesis and 26 studies in the meta-analysis.
- The narrative synthesis gave mixed results, with some studies noting positive associations between increased anxiety or depression and wound healing, while others did not find an association. Results from the meta-analysis found no significant effect of anxiety on wound healing outcomes. However, depression was associated with significantly higher odds of delayed wound healing, higher risk of wound complications, and increased risk of wound infection.
- These findings suggest depression negatively impacts wound healing. There is less evidence for an association with anxiety, but this may be due to less research in this area.

O'Donovan F, Capobianco L, Taylor-Bennett J, Wells A (2025) Relationships between anxiety, depression and wound healing outcomes in adults: A systematic review and meta-analysis. *PLoS One* 20(5): e0309683